

Job Title: ENGINEERING TECH I - PHYSICAL TESTING TECHNICIAN - IPR#46063

Agency : Department of Transportation

Closing Date/Time: 11/17/2022

Salary: \$2,695 - \$4,735 Monthly

Job Type: Salaried Full Time

County: LaSalle

Number of Vacancies: 1

Plan/BU: NR916 - Protech Teamsters

This position is a union position; therefore, provisions of the relevant collective bargaining agreement/labor contract apply to the filling of this position.

All applicants who want to be considered for this position MUST apply electronically through the illinois.jobs2web.com website. State of Illinois employees should click the link near the top left to apply through the SuccessFactors employee career portal.

Applications submitted via email or any paper manner (mail, fax, hand delivery) will not be considered.

Agency Mission Statement

The Illinois Department of Transportation is seeking to hire an Engineering Technician I.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

The department offers extensive training and career advancement opportunities.

- As an Engineering Tech I, you have the possibility of promoting to an Engineering Tech II within 18-24 months.
- A possibility of promoting to an Engineering Tech III within 30-36 months.

Engineering Technician I's with the Illinois Department of Transportation work with engineers from diverse backgrounds, experiences, and careers. They are exposed to both external and internal engineering professionals. This program is a unique opportunity to expand your knowledge and career while networking within a vast engineering network. IDOT offers an ideal program to start and expand an engineering career.

Employees also receive a robust benefit package including:

- Monday-Friday work schedule
- Flexible work schedules are available in many program areas.
- Health, Life, Vision, and Dental Insurance
- Pension Plan
- (10) Weeks paid Maternity/Paternity Leave
- Deferred Compensation Program and other pre-tax benefit programs (Medical/Daycare)
- Employees earn (12) paid Sick Days annually.
- New Employees earn (10) paid Vacation Days their first year of service and can earn up to (25) paid Vacation Days annually.
- Employees earn (3) paid Personal Days annually.
- (13-14) paid holidays annually (based on start date)
- Tuition Reimbursement

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

Job Responsibilities

This is primarily an on-the-job training position. The incumbent should learn how to perform prescribed inspections and testing of aggregates, Hot Mix Asphalt (HMA), and Portland Cement Concrete (PCC) produced for use on bridge and highway construction projects. The incumbent should also acquire the ability to perform the inspections and tests required to ensure that effective embankment construction practices and subgrade controls are used on construction projects. The incumbent should learn how to inspect and test materials including aggregates, pre-cast concrete products, liquid asphalts, reinforcing steel, corrugated metal pipes, and other miscellaneous materials. The incumbent is responsible for proper documentation of inspections and tests and for attending and successfully completing assigned training which will be needed to develop the skills and knowledge to perform these duties.

Subordinate Personnel:	None
Value of Annual Highway Improvement Program:	\$50 Million to \$300 Million
Material Producers and Suppliers Inspected:	Any of over 50 aggregate sources, 25 ready mix plants, 10 hot mix asphalt plants, 4 epoxy bar coat

This position reports to the Area Testing Supervisor, but may report to the Mixtures Control Engineer, Geotechnical Engineer, Physical Test Engineer, HMA Supervisor, PCC Supervisor, or Soils Laboratory Supervisor when operational needs require utilization for field testing and inspection. There are no subordinates reporting to this position.

This position is primarily a training position designed to give the incumbent field and lab exposure to develop the skills and experience to ensure HMA and PCC produced for highway and bridge construction projects within the district comply with state specifications, project plans, and special provisions. It is also designed to give the incumbent experience in inspection and testing aggregates, precast concrete, metals, and other materials. The unique technological aspect of the position is that a sound working knowledge of mixture requirements, test procedures, and proportioning is required, which is gained primarily through both training and experience.

Typical problems faced by the incumbent include sampling and testing to cover plant production and project needs; ensuring that material to be incorporated in the mixtures is from a properly inspected source and meets all applicable specifications and special provisions; and recognizing situations requiring corrective action and recommending the appropriate action to be taken. The greatest challenge for the incumbent is to develop good working relationships with state, local agency, consultant and contractor personnel to achieve conformance with specifications and project requirements without having direct control.

(Job Responsibilities continued)

The incumbent's primary responsibility is to ensure that aggregates, HMA, and PCC construction projects within the district comply with state specifications and special provisions through continuous and effective monitoring of the production and placement processes. The incumbent's objectives are accomplished through observing the contractor's work, collecting samples, maintaining adequate documentation of material production, conducting specified inspections and performing tests. HMA tests include, but are not limited to, compaction density using a nuclear gauge, compaction density using cores, asphalt content, and maximum specific gravity. The incumbent will also perform adequate sampling and inspection on Quality Control for Performance (QCP), Pay for Performance (PFP), and Quality control/Quality Assurance (QC/QA) projects. PCC tests include: air, slump, and strength tests as well as aggregate gradations. Aggregate tests include: gradation and sampling for quality, freeze thaw expansion, alkali-silica reactivity, and specific gravity. Soils tests include: moisture content of soils, Proctor tests to determine weight of soils and grain size analysis of soils. The incumbent should have, or be able to acquire, a good working knowledge of Microsoft Office. This position requires certification in, or the ability to obtain certification in, Aggregate Technician, HMA Level I, PCC Level I and Nuclear Density training within twelve months of hire date in addition to developing on-the-job skills in the field.

The incumbent has the authority to act within his/her area of jurisdiction but consults with his/her supervisor and project Resident Engineers concerning anticipated problems, issues with material quality, or situations where contractor operations might have to be shut down. The position operates within departmental rules, orders, policies, and specifications.

Within the department, contacts are primarily with district Bureau of Project Implementation personnel concerning materials on state, federal, and local agency projects. Outside contacts are with County Engineers, producers, consultants, and contractors. Extensive travel within the district and some travel statewide (approximately 15,000 miles per year) is required. There is the possibility of overnight travel for training. This position requires occasional overtime, heavy/repetitive lifting up to 50 pounds; work in confined spaces, climbing steep terrain; wading in

water; dealing with poisonous plants, animals, insects, rodents, snakes; performing outdoor work in a variety of conditions including, but not limited to, inclement weather (hot, cold, wet, windy, muddy), active construction sites and roadways open to traffic.

The incumbent's performance can be evaluated by his/her success in achieving cooperation of personnel not under his/her direct control in meeting departmental specifications and project requirements, by reviewing project records and reports, and by feedback from Resident Engineers and contractor's personnel.

Principal Accountabilities

1. Ensures material and mixture producers meet the requirements of the Standard Specifications for Road and Bridge Construction, project plans, special provisions and departmental policies.
2. Attends and successfully completes assigned training.
3. Ensures proper documentation and assignment of all materials and tests. Performs inspections and testing to cover material production and project needs. Prepares plant and field reports as directed.
4. Develops good working relationships with construction personnel, contractors, and producers. Sets priorities to ensure that all required inspections are made.
5. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
6. Performs other duties as assigned.

Qualifications

Position Requirements

- Education/Experience:
 - Two years of college in civil engineering technology, pre-engineering or a job related technical/science curriculum OR
 - Two years of engineering experience
- Certification in, or the ability to obtain certification in, Aggregate Technician, HMA Level I, PCC Level I and Nuclear Density training within twelve months of hire date
- Valid driver's license
- Extensive travel with the possibility of overnight stays
- Overtime
- Heavy/repetitive lifting to 50 pounds
- Outdoor work in a variety of conditions

Position Desirables

- Strong oral and written communication skills
- Strong computer skills, particularly with Microsoft Office software

Work Hours: 7:00 AM - 3:30 PM (30-minute lunch)

Work Location: 700 E Norris Dr Ottawa, IL 61350-1628

Office: Office of Highways Project Implementation/Region 2/District 3/Project Implementation

Agency Contact: DOT.CONTACTHR@ILLINOIS.GOV

Job Family: Transportation

APPLICATION INSTRUCTIONS

Use the "Apply" button at the top right or bottom right of this posting to begin the application process.

If you are not already signed in, you will be prompted to do so.

State employees should sign in to the career portal for State of Illinois employees – a link is available at the top left of the Illinois.jobs2web.com homepage in the blue ribbon.

Non-State employees should log in on the using the "View Profile" link in the top right of the Illinois.jobs2web.com homepage in the blue ribbon. If you have never before signed in, you will be prompted to create an account.

If you have questions about how to apply, please see the following resources:

State employees: Log in to the career portal for State employees and review the Internal Candidate Application Job Aid

Non-State employees: on Illinois.jobs2web.com – click "Application Procedures" in the footer of every page of the website.

The main form of communication will be through email. Please check your "junk mail", "spam", or "other" folder for communication(s) regarding any submitted application(s). You may receive emails from the following addresses:

- donotreply@SIL-P1.ns2cloud.com

- systems@SIL-P1.ns2cloud.com